

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-23 are currently pending, with Claims 15-22 being withdrawn as directed to non-elected inventions. Claims 1, 3, 5, and 7 have been canceled without prejudice; and Claims 2, 4, 6, 8-14, and 23 have been amended by the present amendment. The changes to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, the specification was objected to as not containing appropriate section headings; Claim 12 was rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter; and Claims 1-7, 13, 14, and 23 were rejected under 35 U.S.C. §102(b) and 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. US2002/0076046 to Heylen (hereinafter “the ‘646 application”).

Applicant respectfully submits that the objection to the specification is rendered moot by the present amendment to the specification. The specification has been amended to include appropriate section headings. Accordingly, the objection to the specification is believed to have been overcome.

Applicant respectfully submits that the rejection of Claim 12 under 35 U.S.C. §101 is rendered moot by the present amendment to Claim 12. Claim 12 has been amended to be directed to a computer program product comprising computer program means embedded on a computer readable medium. Accordingly, Applicant respectfully submits that amended Claim 12 is directed to statutory subject matter and satisfies 35 U.S.C. §101.

Applicant respectfully submits that the rejections of Claims 1, 3, 5, and 7 are rendered moot by the present cancellation of those claims.

Claim 2 has been amended to incorporate the limitations of Claim 1. In particular, amended Claim 2 is directed to a method for producing a copy protected record carrier for

digital data, comprising: (1) determining at least one predetermined repetitive bit pattern which encodes into channel bits having an accumulated digital sum value that exceeds a first predetermined limit and that is below a second predetermined limit; (2) replacing at least one part of the digital data to be recorded by the at least one predetermined repetitive bit pattern and/or inserting the at least one predetermined repetitive bit pattern into at least one part of the digital data to be recorded; and (3) transferring the digital data, including the at least one replaced and/or inserted part, onto the record carrier by a mastering process so that the accumulated digital sum value, which exceeds the first predetermined limit and is below the second predetermined limit, is achieved in the at least one replaced and/or inserted part. Further, Claim 2 recites that the predetermined repetitive bit pattern is selected so that an abnormal writing beam deviation from an ideal position of a writing beam of a record carrier recording device for recordable record carriers is large enough to ensure that a writing process will be aborted or disturbed.

The '046 application is directed to a method of copy protecting optical discs using the differences in capability between an encoder associated with a laser beam recorder and that in currently available CD writers. The '046 application discloses that the method of copy protecting an optical disc includes the step of generating an authenticating signature from data patterns such that the authenticating signature cannot be accurately written onto a copy disc by a writer for recordable discs. Thus, the '046 patent discloses that "a CD writer will write a disc which, when read will result in the CD reader returning corrupted data or information signaling a read error."¹ Further, the '046 patent discloses that the '046 method causes the production of "a resulting CD 70 which has severe readability problems."² Thus, the '046 patent discloses that a CD writer will be able to write the disc, but that there will occur problems when reading the written CD. However, Applicant respectfully submits that

¹ See paragraph [0089] of the '046 application. Emphasis added.

² *Id.*

the '046 application fails to disclose a method for producing a copy protected record carrier for digital data, comprising determining at least one predetermined repetitive bit pattern, wherein the at least one predetermined repetitive bit pattern is selected so that an abnormal writing beam deviation from an ideal position of a writing beam on a record carrier recording device for recordable record carriers is large enough to ensure that a writing process will be aborted or disturbed. Rather, as discussed above, the '046 application discloses that a CD writer will be able to write a disc, but when read, the CD reader will return corrupted data or information signaling a read error. Accordingly, Applicant respectfully traverses the rejection of Claim 2 as anticipated by the '046 application.

Independent Claim 4 is directed to a method for producing a copy protective record carrier for digital data, including the determining, replacing, and transferring steps recited in independent Claim 2. Further, Claim 4 clarifies that the predetermined bit pattern is selected so as to cause an abnormal writing beam deviation from an ideal position of a writing beam of a record carrier recording device for recordable record carriers, and is selected so as to cause an abnormal reading beam deviation from the ideal position of a reading beam of a record carrier reading device which copies a copy of the copy protected record carrier recorded on a recordable record carrier, wherein the combined effect of the writing beam deviation and the reading beam deviation is large enough to ensure that a reading process will be aborted or disturbed.

As discussed above, the '046 patent is directed to a method of copy protecting optical discs. However, Applicant respectfully submits that the '046 patent fails to disclose determining at least one predetermined repetitive bit pattern, wherein the predetermined repetitive bit pattern is selected so as to cause an abnormal writing beam deviation from the ideal position of a writing beam of a record carrier recording device, and that the predetermined repetitive bit pattern is selected so as to cause an abnormal reading beam

deviation from an ideal position of a reading beam of a record carrier reading device, as recited in Claim 4. As discussed above, the '046 patent discloses that a CD writer is able to write to the disc but that, when read, the CD reader returns corrupted data or information signaling a read error. Accordingly, Applicant respectfully traverses the rejection of Claim 4 as anticipated by the '046 patent.

Amended Claim 6 is directed to a method for producing a copy protected record carrier for digital data, and recites the determining, replacement, and transferring steps recited in Claim 2. Further, Claim 6 recites that the predetermined repetitive bit pattern is selected so that merge bits are predefined and not changeable by recording electronics of a recorder due to design rules of a digital data content of the record carrier.

As discussed above, the '046 application is directed to a method of copy protecting optical discs. As disclosed in paragraph [0067], the '046 application discloses that a set of three merge bits are added between each fourteen bit symbol to ensure that there are no violations of the 3T-11T coding scheme and to ensure that a suitable DSV is maintained. However, Applicant respectfully submits that the '046 application fails to disclose that a predetermined repetitive bit pattern is selected so that merge bits are predefined and not changeable by recording electronics of a recorder due to design rules of a digital data content of the record carrier, as recited in Claim 6. The '046 patent is silent regarding the limitation that the predetermined repetitive bit pattern is selected so that merge bits are predefined and not changeable, as recited in Claim 6. Accordingly, Applicant respectfully traverses the rejection of Claim 6 as anticipated by the '046 application.

Independent Claims 13, 14, and 23 recite limitations analogous to the limitations recited in Claim 2. Accordingly, for the reasons stated above for the patentability of Claim 2, Applicant respectfully submits that the rejection of Claims 13, 14, and 23 are rendered moot by the present amendment of those claims.

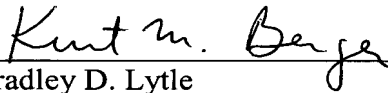
Claims 8-11 have been amended to be in independent form. Accordingly, based on the indicated allowability of Claims 8-11, Applicant respectfully submits that those claims are in condition for formal allowance.

Thus, it is respectfully submitted that independent Claims 2, 4, 6, 8-11, 13, 14, and 23 (and all associated dependent claims) patentably define over the '046 application.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 03/06)
KMB/rac

Kurt M. Berger, Ph.D.
Registration No. 51,461

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